

# What's hot and what's not

## I Wilson

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## Abstract

This paper provides an update on issues related to gas transportation.

Natural Gas Corporation (NGC) has restructured its gas transportation business. The two business units of Transmission and Networks have now been brought together into a single Infrastructure business.

Open access continues to evolve. The New Zealand Gas Pipeline Access Code which established the framework of principles is now well established. Information Memoranda, where pipeline owners set out their access regimes and prices, have become familiar features of the commercial landscape. Now attention is on the mechanics of reconciling gas quantities flowing through shared pipeline facilities and a web of contract arrangements.

Aspects of the Transmission access regime continue to be debated and the regime continues to develop. NGC released an Issues Discussion Paper in March 1999 and, following extensive industry discussion, an Issues Position Paper in August 1999. Several other topic specific papers were also released during the year.

Discussion on some of these issues can be expected to continue this year. The hot topics will include zone pricing, post-facto trading and the entry of Wairoa gas.

## Introduction

Today I want to give you an update on developments in pipeline access. I'll review changes over the past year and talk about the issues that are live at the moment and those that have been dealt with – what's hot and what's not.

## NGC's infrastructure business

First, I'd like to explain some changes that have taken place inside NGC.

In the past, Transmission and Networks have operated as separate business units. Yet the commercial aspects of these were very similar. Both were gas transporters contracting to transport gas for essentially the same set of traders. Both were subject to the same regulatory regimes. Both had similar business functions and processes.

So, when AGL acquired FCE's interest in NGC in October last year, the business was restructured. It was not just a matter of putting Transmission and Networks together, it was the adoption of a set of concepts which AGL had developed in realigning its Australian pipeline business.

The new model developed by AGL for its Energy Infrastructure business (Figure 1) distinguishes between the

three distinct roles of Asset Owner, Asset Manager, and Service Provider.

It recognises that there is no need for AGL, or NGC, to own all the assets it manages. Its core asset management competencies could be available to any infrastructure owner.

This Asset Management function has two aspects – commercial and technical. In NGC, I have been appointed as Manager of the Commercial Asset Management team and Ed De Prinse will manage the Technical Asset Management team.

Between us we are responsible for the physical and economic performance of the assets and defining and managing all activities performed on the asset.

The actual operational work is performed by various service businesses. Conceptually there may be up to five of these businesses:

- engineering and construction services
- repairs and maintenance services
- monitoring and control (Scada and communications)
- metering and measurement

- support services (accounting, information technology, human resources).

Whether or not NGC restructures into all five remains to be seen. What is sure is that we will continue to adapt to the business and regulatory environment and look for smarter ways to deliver transport services and operate and maintain pipeline assets.

## Reconciliation

Open access to pipelines requires a framework of principles that will allow users to share facilities.

At a high level these principles are set out in the New Zealand Pipeline Access Code which was developed by the industry from 1995 and 1997. They are then articulated in more detail in the individual Information Memoranda of pipeline owners. These documents describe the services offered by the pipeline companies and the price of those services. They also contain a raft of related information: system maps, confidentiality protocols, new investment policies, prudential requirements, negotiated price policy, a dispute resolution procedure and so on.

So the Access Code sets the framework of principles and the Information Memoranda define the policies. But there is a level of mechanical detail below these principles and policies which is required to make the whole system work.

Towards the end of 1998 a gas industry working group was formed to deal with one of these areas of mechanical detail – the reconciliation of gas quantities. Initially only those few companies directly involved in reconciliation were involved but as the pace of competition picked up in 1999 reconciliation became the hot topic.

Now membership of the working group comprises representatives of all the industry service providers:

transmission, networks, wholesalers, retailers and those directly involved in billing and reconciliation of customer deliveries.

So what is reconciliation about? I'll briefly describe what is required and the solution that has been developed by the working group.

Figure 1 is a schematic representation of a gas transport system carrying gas from wellhead to end users. After treatment, specification gas is received into the Transmission pipeline and carried to various Transmission System Delivery Points. It is then passed into a Distribution Network for final delivery to end users.

Figure 2 is a representation of the gas flows which must be reconciled among competing retailers using common metering facilities at Points of Transfer. For example, 100 units of gas may be metered at the Transmission System Delivery Point. The Allocation Agent for that Point of Transfer would need to determine how much of those 100 units were attributable to Retailer 1, Retailer 2 and Retailer 3. This is done by obtaining information about those retailers' final deliveries to their customers (the red, blue and green dots on the network). Some of these customers may have time of use meters (the large ones) while others will have deemed profiles. The Allocation Agreement will say how these quantities will be allocated. It will probably refer to a particular allocation procedure set out in the Reconciliation Code.

At the time of writing the Reconciliation Code is going through a legal review and a final document will be available shortly. Although the legal review is important, it will have little practical effect. The code is already in effect and the concepts it has established are embedded in the various use of systems agreements and allocation agreements.

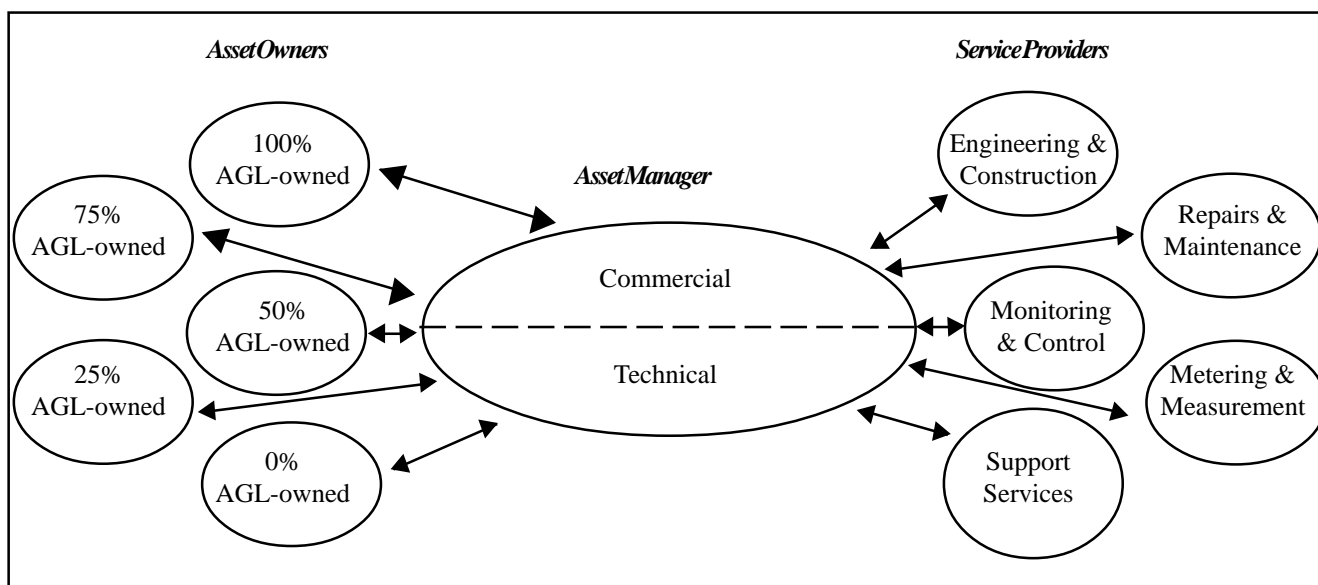
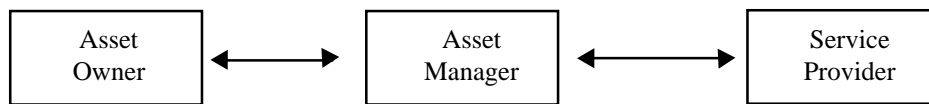


Figure 1: AGL's energy infrastructure concept.



Status:	<ul style="list-style-type: none"> <li>Legal owner of asset</li> </ul>	<ul style="list-style-type: none"> <li>Manager of asset, under contract to Asset Owner</li> </ul>	<ul style="list-style-type: none"> <li>Provides services to Asset Manager</li> </ul>
Accountabilities:	<ul style="list-style-type: none"> <li>Whole-of-life return on investment in the asset</li> <li>Compliance with legal, regulatory and commercial requirements</li> </ul>	<ul style="list-style-type: none"> <li>Physical asset performance</li> <li>Economic asset performance</li> </ul>	<ul style="list-style-type: none"> <li>Delivery of services on time, within budget and to high quality</li> </ul>
Responsibilities:	<ul style="list-style-type: none"> <li>Set priorities for management of the asset</li> </ul>	<ul style="list-style-type: none"> <li>Identify investment decisions for the assets (CapEx &amp; OpEx)</li> <li>Define and manage all activities performed on the asset</li> </ul>	<ul style="list-style-type: none"> <li>Carry out all activities performed upon the asset</li> </ul>

Figure 2: Role definitions.

## Access issues

There never seems to be a shortage of issues related to access regimes and pricing.

Aspects of the Transmission access regime continue to be debated and the regime continues to develop. NGC released an Issues Discussion Paper in March 1999 and, following extensive industry discussion, an Issues Position Paper in August 1999.

I won't cover all the changes which came about as a result of last year's discussions but I will mention a few significant changes. The position paper is available if anyone wants more detail.

## Transport of third party gas

NGC's standard Transmission Services Agreement (TSA) now allows for the transport of third party gas. In fact there were already a number of arrangements in place where NGC had agreed that the holder of a TSA could transport gas for a third party. To that extent the change was just a recognition of the greater flexibility required by the market.

## Gas quality

There was a lot of debate about gas quality and who should carry the liability for any damages resulting from the delivery of non-spec gas. Retailers were particularly unhappy that, although they had no control over gas specification, they would be held responsible if non-specification gas were delivered to their customers. A similar situation existed in relation to odourisation.

On matters of liability it is generally accepted that the most efficient outcome is achieved when the party who controls the factors giving rise to a liability risk takes responsibility for that risk. So, in relation to gas quality, it would be efficient for the chain of supply contracts to allow liability of off-spec gas to be sheeted home to the party who controls the gas specification – generally the producer.

Since retailers were not satisfied that the chain of supply contracts would allow this, they wanted NGC Transmission to accept responsibility for the delivery of non-spec gas. We would not do so because we could not control the gas specification.

However, we did accept that Transmission was in control of the primary odourisation of the gas.

So, in NGC's standard Transmission Services Agreement it now undertakes to inject such quantities of a suitable odourant into the gas stream as would normally ensure that the gas, when delivered through an average distribution network, meets GCP3 requirements. This is a prudent level of injection but not one which is sufficient for all circumstances. In particular, odourant fade can be especially marked in new pipelines. Network owners and retailers will need to be especially vigilant in these situation and may need to inject additional odourant.

## Backhaul

Another issue on which NGC has changed its position is on the provision of a backhaul service. There was almost complete agreement in the industry that backhaul was a common service offered by overseas pipeline companies and it should be similarly offered here. It was argued that in offering a backhaul service NGC would only be offering an

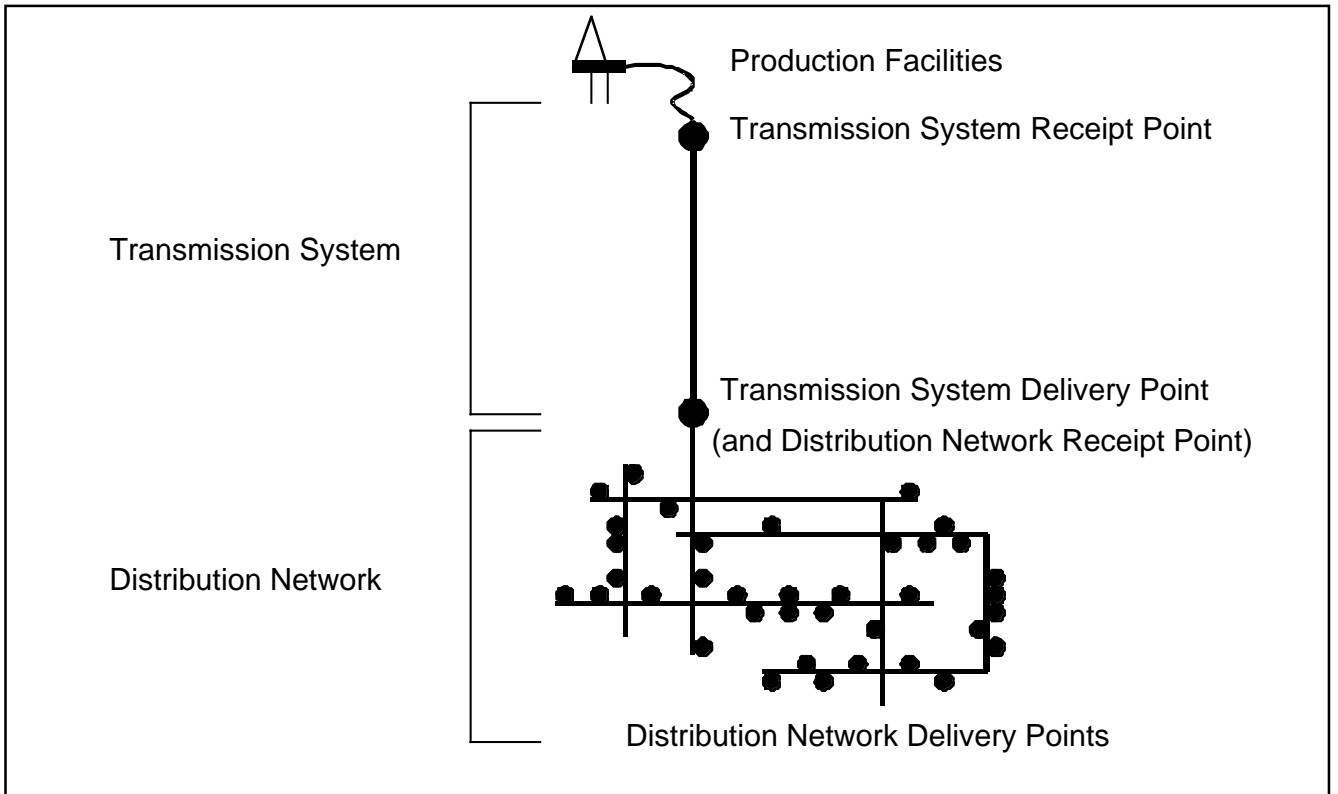


Figure 3: Physical set-up.

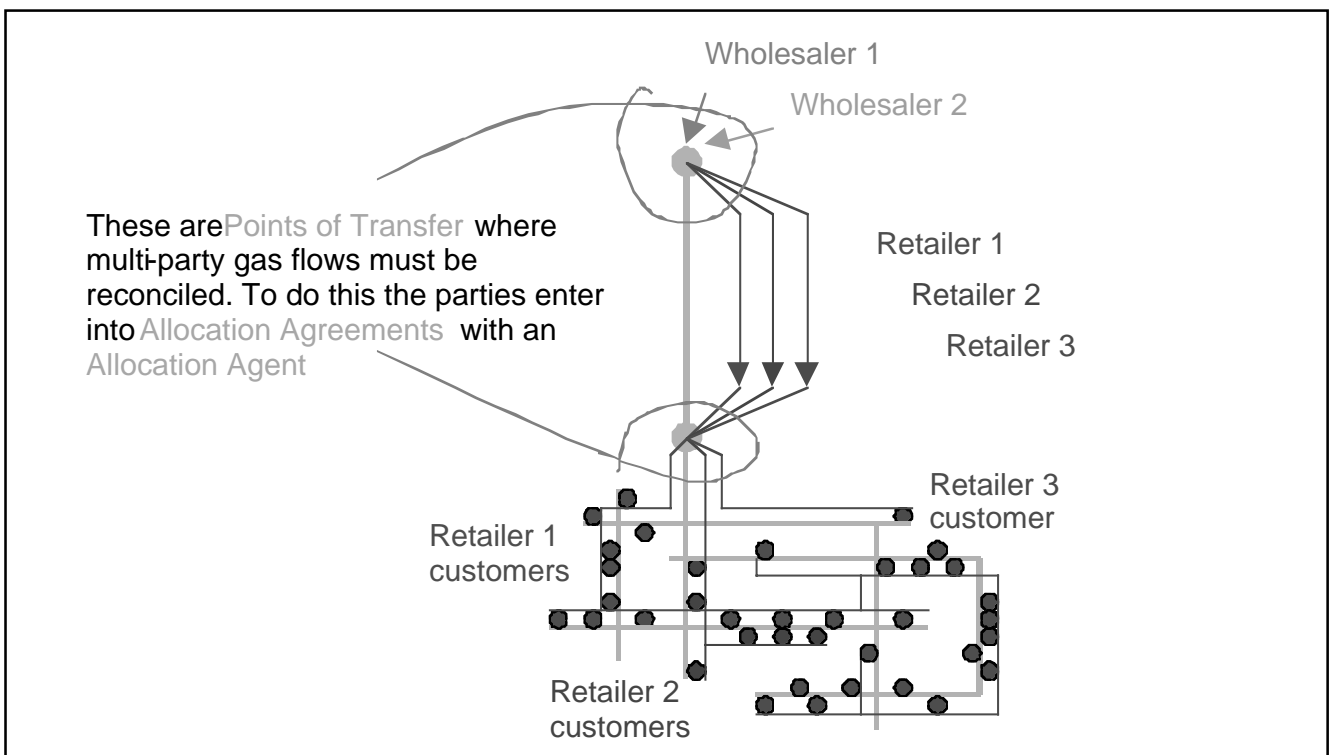


Figure 4: Representation of flows to be reconciled.

alternative to gas swaps and that the move would therefore be pro-competitive.

NGC still believes that in most situations where backhaul is likely, a gas swap will be possible and should be negotiated. However, we also accept that there will be situations where our customers do not wish to negotiate with other retailers

and prefer to obtain the service directly from Transmission. So backhaul is now a service which will be offered on request.

### Capacity transfers

Some changes have also been made in simplify the capacity transfer process. The requirement to notify other retailers of

a transfer has been removed. The capacity transfer form was shortened and the notice period required for transfers was reduced from three business days to one.

## Post-facto capacity trading

In the course of discussing these other issues with the industry, NGC raised the possibility of capacity being traded after the gas day – post-facto Capacity Transfers. To facilitate discussion on this matter a discussion paper was prepared by Ernst and Young.

The issues around post-facto transfers are too involved to cover in this paper. What I will say is that some interesting discussions have been held in the industry and this will certainly be a hot topic in 2000.

Now, finally on the matter of access issues I'd like to talk about a few pricing matters.

## Zone pricing

It has been argued by some customers that where DPs are in close proximity, they should be treated as a single DP. Or, at least, where a customer overruns at one but has more than enough capacity booked at the other to cover the overrun, there should be no charge for overrun.

Other customers felt that close proximity should not be a reason to treat a group of delivery points as one. Their view was that this should only be done where distribution systems were significantly interconnected such as in Hamilton or Auckland.

NGCT believes that the issues of grouped delivery points, multiple delivery points serving a common network and price volatility are all closely related. NGCT's preferred approach is to address all these issues together rather than implementing solutions which only address each one in isolation.

NGCT's view is that wider Auckland should form a single pricing zone with a single capacity reservation fee. The zone could include all 15 of the wider Auckland delivery points: Tuakau, Harrisville, Ramarama, Drury, Papakura, Hunua, Alfriston, Flat Bush, Waiuku, Westfield, Bruce McClaren, Henderson, Waikumete, Waimauku and Waitoki. Because the zone would be spread so far along the pipeline it would still be necessary to determine where in the zone gas is to be delivered but this would no longer have any pricing implications.

This zone would have a relatively stable asset base and level of demand, prices should therefore also be very stable.

However, NGC felt that its customers should be given more time to consider this move towards zoned pricing. Discussion on this matter will continue this year. Another hot topic.

## Overrun charges

Another pricing matter which has always raised strong feelings in the industry is the level of overrun charges. The cost of overrunning reserved capacity by 1GJ was 20/365 times the cost of reserving 1GJ of capacity for a full year. Some customers argued that this level of overrun charge was too high.

To allow some rational comparisons to be made NGC had commissioned Ernst and Young to review overseas practice in this area. The conclusion was that, although NGC's overrun charge did appear to be relatively high, it could not be looked at in isolation. The overrun charge was an integral part of the access regimes and must be considered together with other components of the regime.

However, most customers did consider that the charges exposed shippers to large financial penalties unrelated to economic cost. Also, at least one customer considered that the charge amounted to a restrictive trade practice while NGC remained vertically integrated because the overrun risk for NGC's retailer was internalised.

My view was that a fall in the overrun fees would result in a reduction in the amount of capacity reserved and an increase in the number of overruns and the cost of managing them.

In the event NGC did reduce overrun fees. In fact they were halved. Although the final result of this will not be clear until the winter arrives, it certainly looks as if the amount of overrun has significantly increased. However, it is also probably true that shippers are more comfortable with the outcome.

## Wairoa gas

If the Wairoa gas discovery is developed and Wairoa gas is supplied to the Napier/Hastings market, NGC's Hawkes Bay pipeline will effectively have been bypassed. The price of transport from Kapuni to Hastings would fall to some bypass price.

What is less clear is how other prices are affected. For example what would the price of transport from Hastings to Kapuni be? Should it cost the same to transport Wairoa gas 330 km as it does to transport Maui gas that far in the other direction? And does it matter that neither gas would travel that far but would only flow to some balance point around Palmerston North?

These are interesting questions to grapple with. Shortly after the discovery of the Wairoa gas resource NGC engaged in discussion with Orion/Westech on the terms of access to NGC's pipeline. It was clear from the outset that the introduction of Wairoa gas into the South pipeline would raise significant issues for NGC and its customers both in respect of the access regime and pricing methodology. To help us frame these issues and lay out some possible answers NGC engaged Ernst and Young to prepare a discussion paper.

The discussion paper was released to the wider industry towards the end of last year and a forum was held to facilitate some industry debate. It is too early to judge the outcome of these developments but this consultative process will be another hot spots on this year's map.

## **Outstanding matters**

### **Contingency planning**

When I talked at the Queenstown conference in 1998, I mentioned some unfinished business in the industry which needed attention. One item was odourisation which I dealt with earlier. Another was contingency planning.

I'm pleased to say that a project to develop a Gas Contingency Plan was begun in August 1998. That project culminated successfully in April 1999.

### **Transmission/distribution relationship**

In my 1998 paper I also talked about some vagueness in the relationship between transmitter and distributor – the fact

that there was no contractual arrangement between them but co-operation was clearly required.

This issue remains and we will be proposing some appropriate working agreements in the next few months to address the issue.

## **Conclusion**

The competitive gas market has really taken off in the last year. The industry had done everything necessary to allow for it – unbundled contracts, established access and pricing regimes, developed self-regulatory codes – but it is only now that we are really seeing the profound effects these changes have allowed.

NGC is also changing. In AGL it now has a single minded, experiences and well-resourced owner. Expect the changes to continue!

What will not change is our commitment to work with customers to provide the most suitable and effective gas delivery system: safe, reliable and efficient.

## **Author**

IAN WILSON is presently Manager, Commercial Asset Management for NGC's Infrastructure business. He has degrees in engineering and economics and has held a wide range of management positions in the gas industry.